

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 17/30	A1	(11) International Publication Number: WO 98/54662 (43) International Publication Date: 3 December 1998 (03.12.98)
(21) International Application Number: PCT/US98/10679 (22) International Filing Date: 26 May 1998 (26.05.98) (30) Priority Data: 08/863,680 27 May 1997 (27.05.97) US (71) Applicant: ARKONA, INC. [US/US]; Suite 3409, 4505 South Wasatch Boulevard, Salt Lake City, UT 84124 (US). (72) Inventors: ZOLLINGER, John, M.; 3563 East Wasatch Grove Lane, Salt Lake City, UT 84121 (US). DEVINE, Johnathan; Loft 408, 300 Beale Street, San Francisco, CA 94105 (US). (74) Agents: STRINGHAM, John, C. et al.; Workman, Nydegger & Seeley, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake city, UT 84111 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: **METHOD, COMPUTER PROGRAM PRODUCT, AND SYSTEM FOR DISTRIBUTING CHANGES MADE IN A DATA STORE TO REMOTE CLIENT COPIES OF THE DATA STORE**

(57) Abstract

A method, computer program product, and system that allows changes made to an original database table found on a server computer to be reflected in client copies of the database table based on intermittent client requests for synchronization. A server makes periodic updates of table differences between current table (20) receiving database change events and reference table (28). Each client copy of a database table and update (created by the server has a sequential version number associated therewith). The server will compare the version number of a client copy of a database table with the most recent version number of the table on the server to determine which updates need be applied in order to make the client copy current. Next, the updates will be translated from a generic format into instructions that are specific to the type of database engine being run on the client. Finally, the instructions are transmitted to the client (along with the new version number) so that the client may operate the database engine to apply the instructions for making the database table current with the original managed on the server.

